

ABSTRACT

Title: Nutrition for endurance runners

Objective: The aim of this bachelor thesis is to explain the importance of training diet, particularly a diet for marathon runners in the age of 30 – 40 years. Proposal of diet composition for marathon runners.

Methods: I conducted a literature research of czech and foreign sources regarding training diet to get relevant information. I also searched for scientific papers using the internet database EBSCO and Scopus.

Results: Recommended amount of carbohydrates increases with duration. 8 – 10 g/kg of body weight is needed for a race lasting 2 – 4 hours. Recommended amount of proteins is 1,2 – 1,6 g/kg of body weight. The amount of fats, recommended for endurance running, is 1 g/kg of body weight.

The runner should be well hydrated. Dehydration decreases performance. It is recommended to drink isotonic sport drinks with carbohydrates added.

It is recommended to eat polysaccharide snack with low glycemic index weighing 1 g/kg of body weight. Endurance performance can be enhanced by consuming 100 – 250 kcal of carbohydrates every hour after the first hour of the race. It is also recommended to consume carbohydrates with high glycemic index and proteins (the ratio of carbohydrates to proteins being 4:1) 30 to 90 min. after finishing the performance.

Medium chain fatty acids and caffeine protect muscle glycogen and extended endurance performance.

Keywords: Endurance, running, nutrition, performance